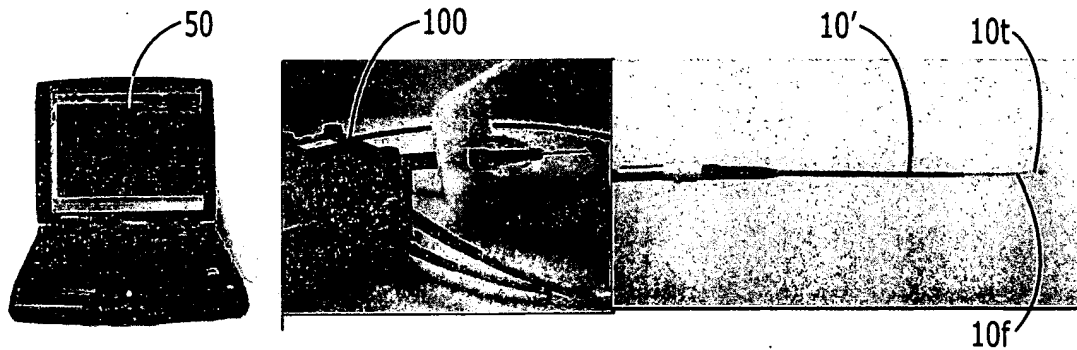


Transmittance of light vs. wavelength through dog blood and serum. The times noted are the integration time of the multichannel analyzer.

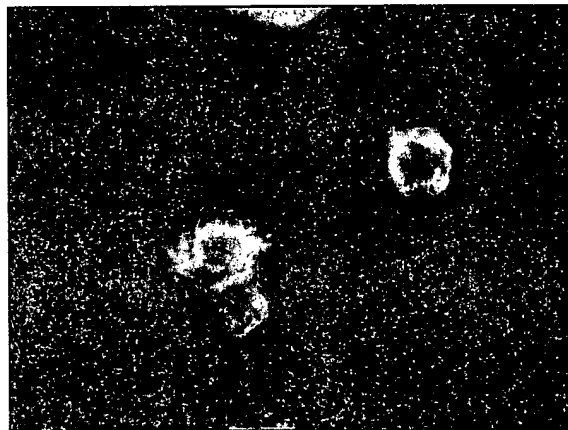
FIG. 2

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Components of the current fiber optic probe: laptop, multichannel analyzer, and fiber optic probe.

FIG. 3



Microscope view of Raji human lymphoma cells (in pellet form) labeled with Alexa Fluor 647 conjugated to anti-CD20. There is a concentration of the cells around the membrane. The images were made with a 647 nm line of a 100 mW Krypton/Argon laser, using exciter filter 647/10 and emitter 700/75, and captured with a Hamamatsu Orca ER 12 bit camera through a Yokagawa brand spinning Nipkow disc.

FIG. 4

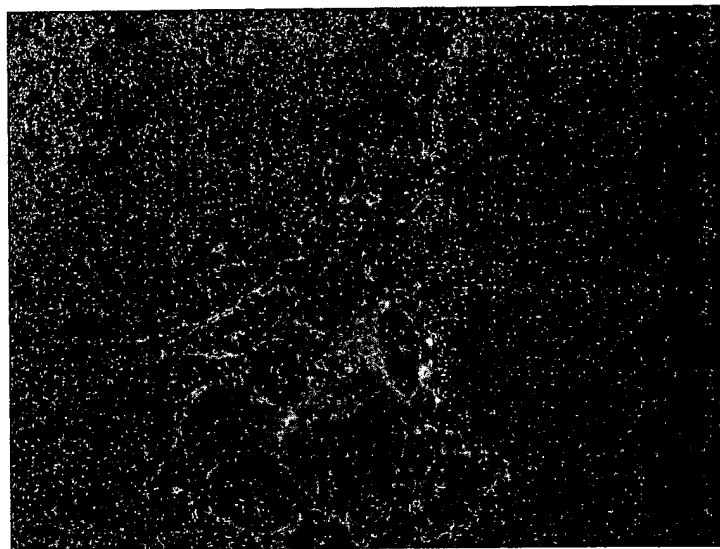
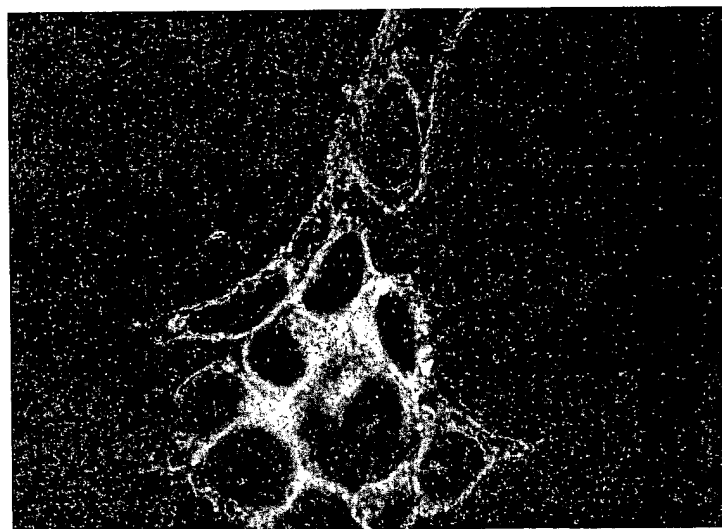


FIG. 5A

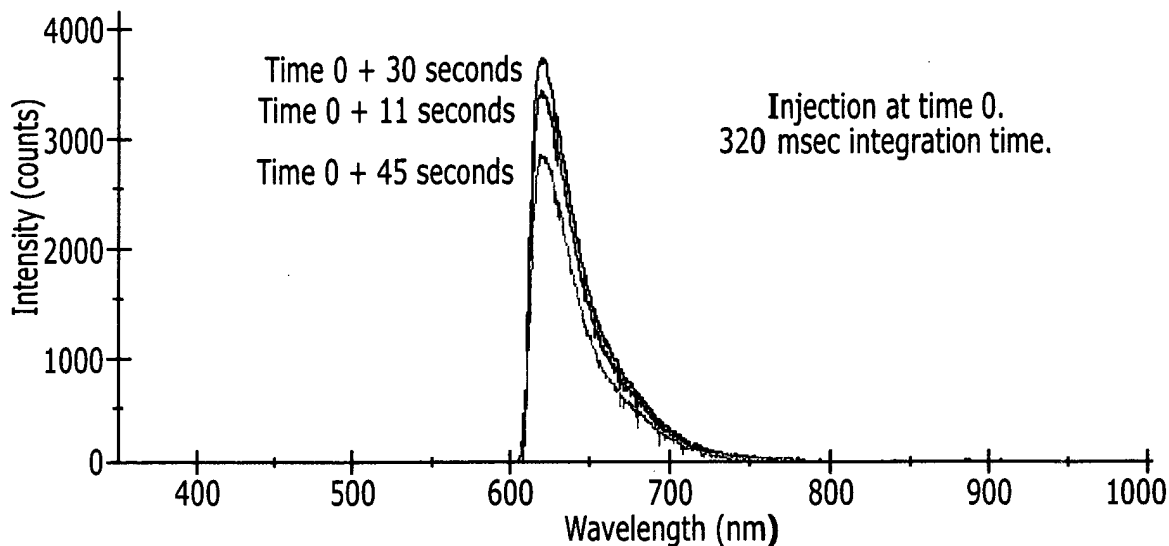


Confocal microscope images of BT474 cells fixed and labeled with anti-cerbB2 (LabVision, Inc.). The images were made with a 568 nm or 647 nm line of a 100 mW Krypton/Argon laser and captured with a Hamamatsu Orca ER 12 bit camera through a Yokagawa brand spinning Nipkow disc. Figure 5A was taken with 647 nm, thus showing the primary antibody labeling. Figure 5B image was taken at 568 nm, thus showing the secondary antibody labeling.

FIG. 5B

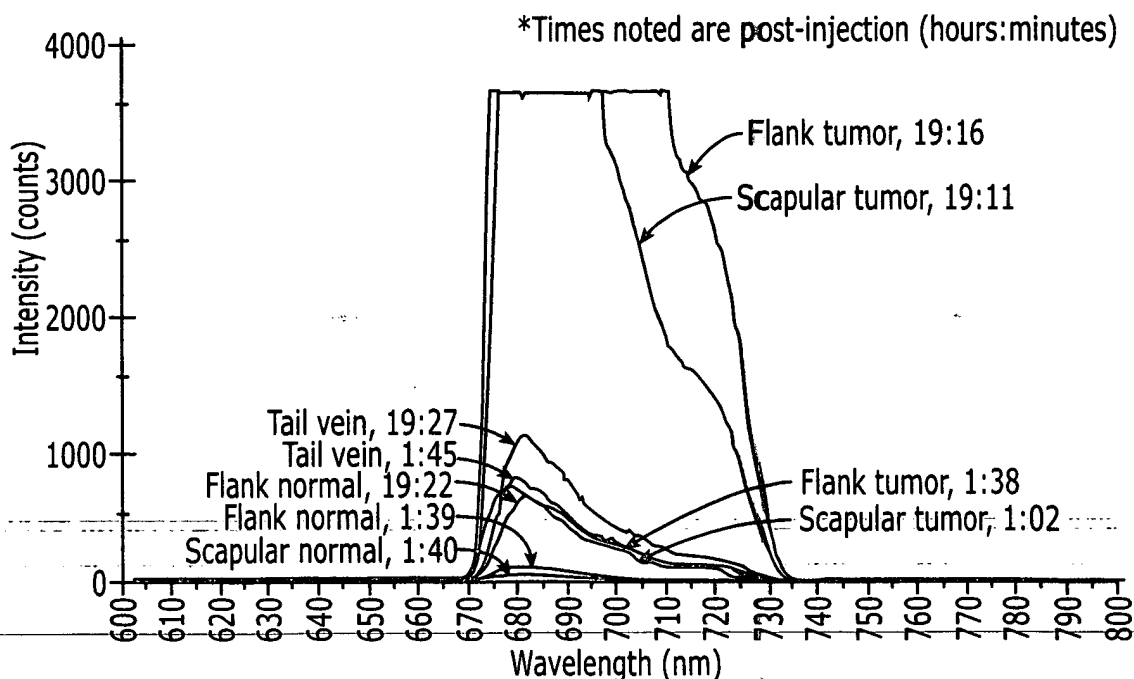
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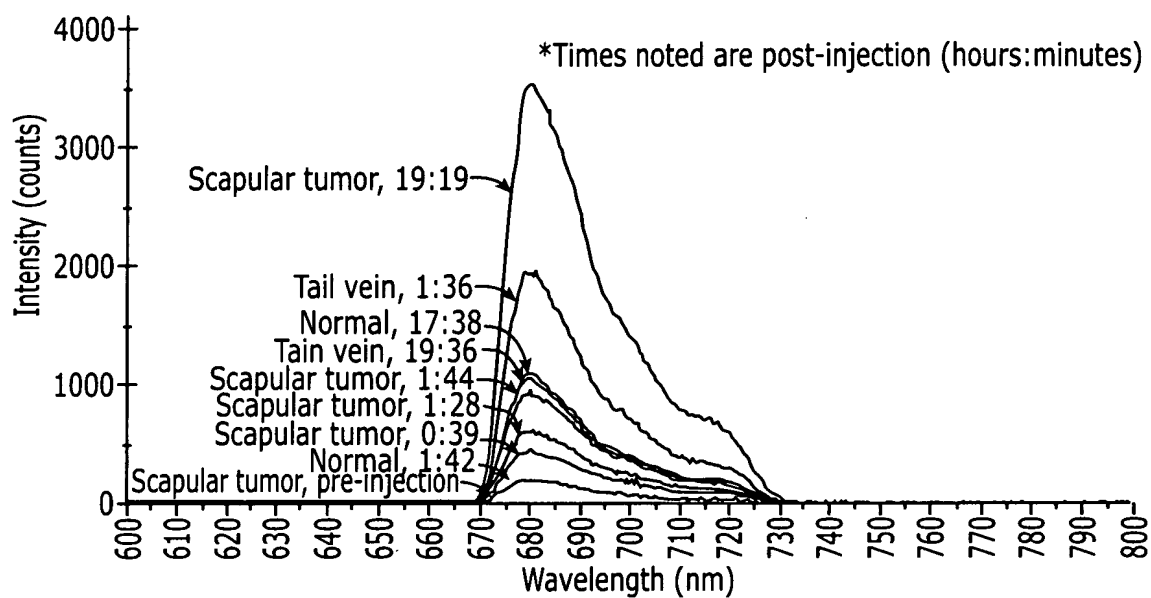
Intensity vs. wavelength for Alexa Fluor 594 hydrazide (Molecular Probes), MW 759: clearance curve after fluor administered in rat tail vein at time 0. Subcutaneous placement of fiber optic probe in Fisher 344 rat. Plots of signal (320 ms integration time) at three different time points: 30 seconds (highest intensity), 11 min., 45 min.

FIG. 6



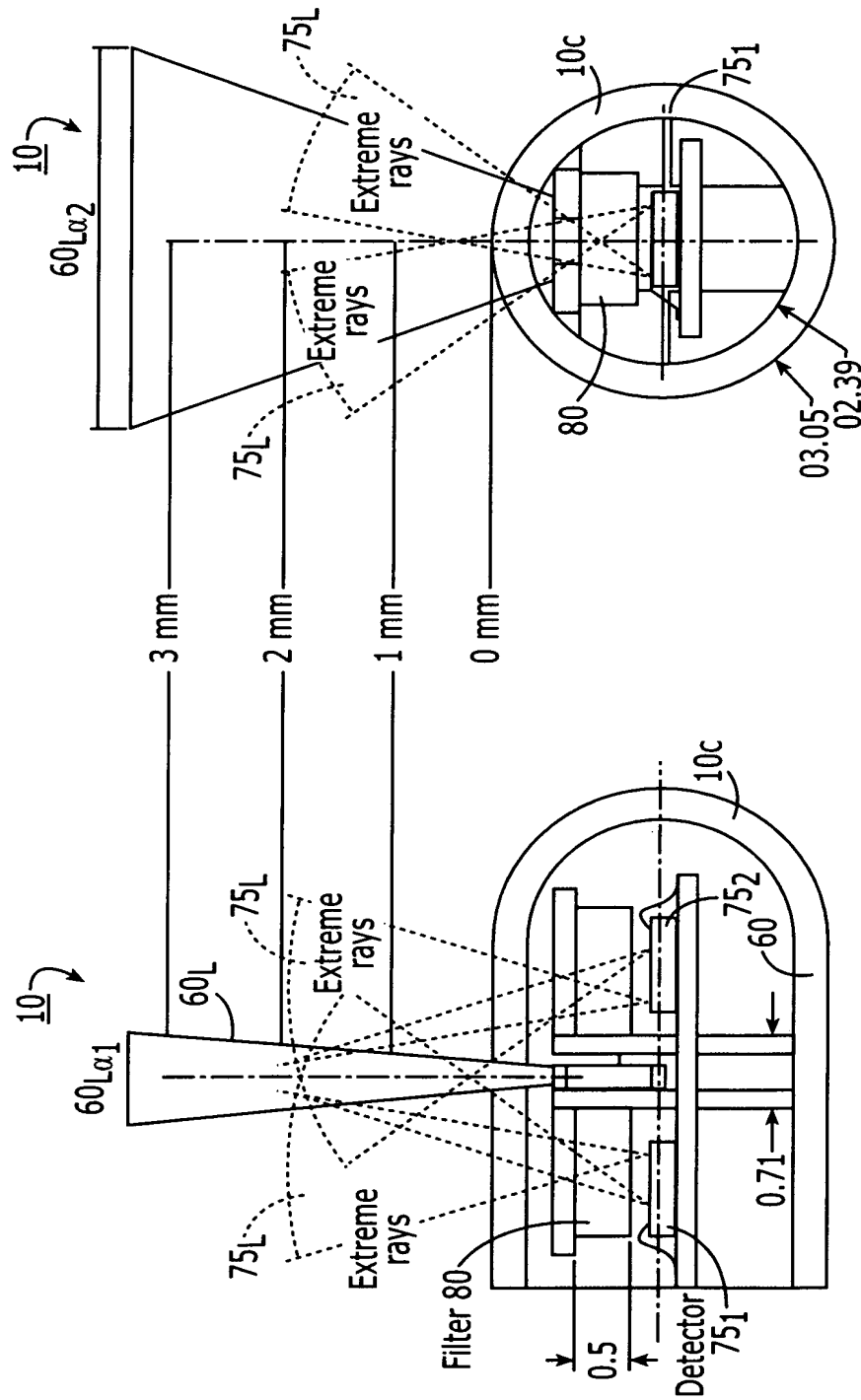
Alexa 647 labeled Herceptin uptake in nude mouse with human BT474 scapular and flank tumors. Time of injection is 0:00.

FIG. 7



Alexa 647 labeled anti-CD20 in nude mouse implanted with Raji Burkitt's human lymphoma tumor. Injection time is 0.00.

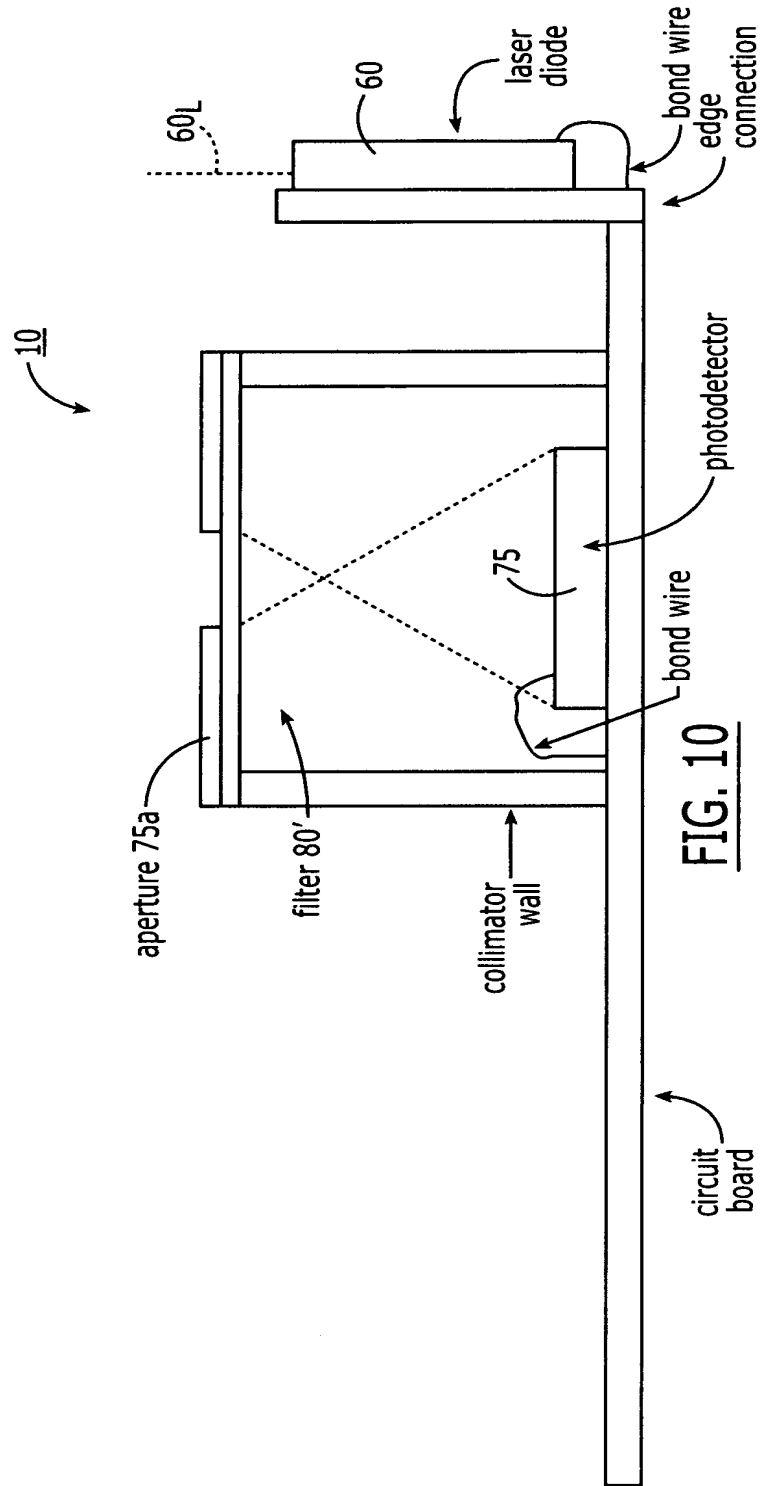
FIG. 8



Figures 9A and 9B: Side and end view schematics of the diode-based sensor in glass capsule
(dimensions in mm)

FIG. 9A

FIG. 9B



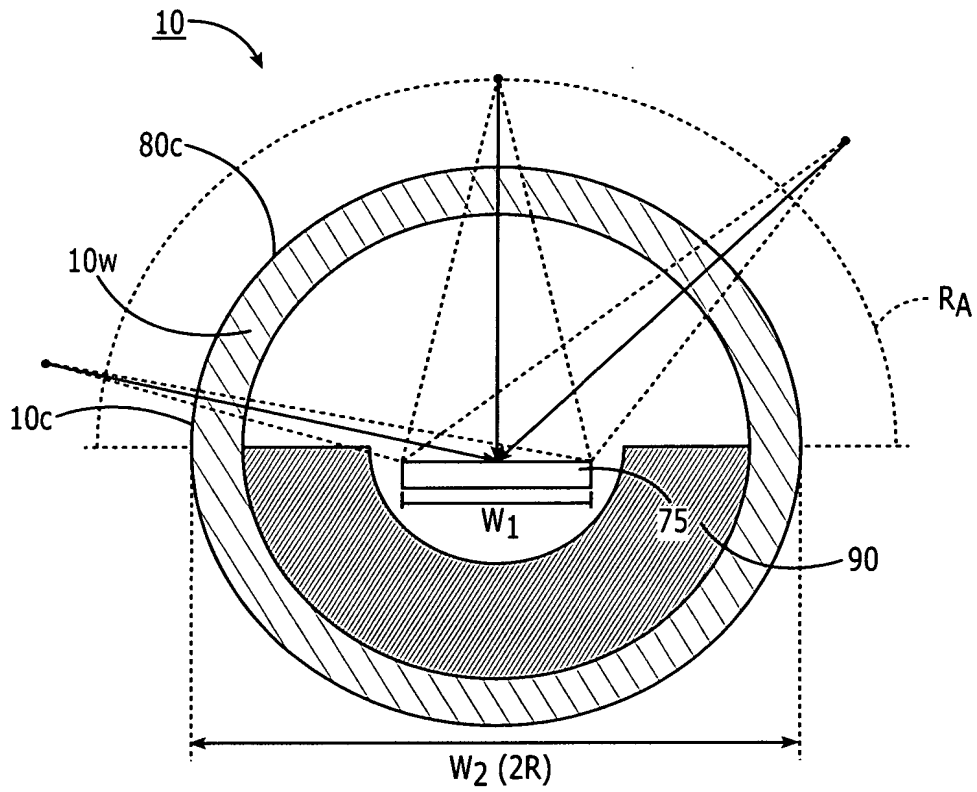


FIG. 11A

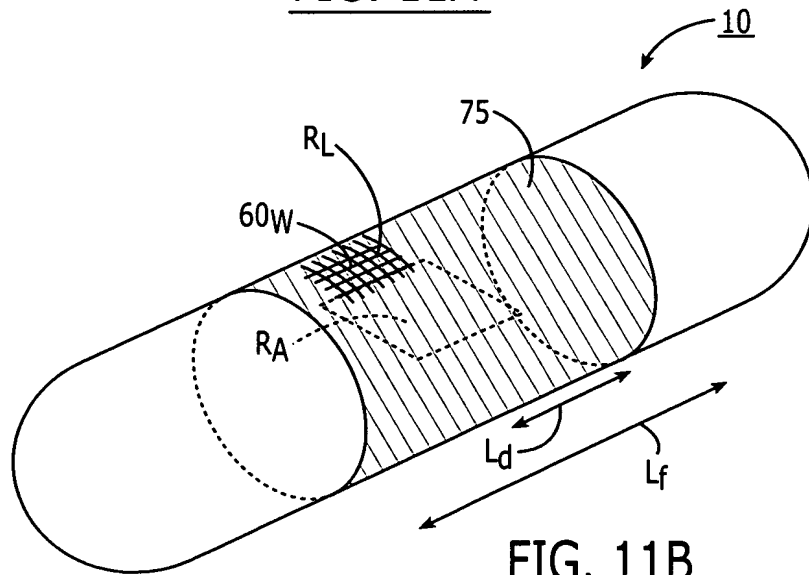


FIG. 11B

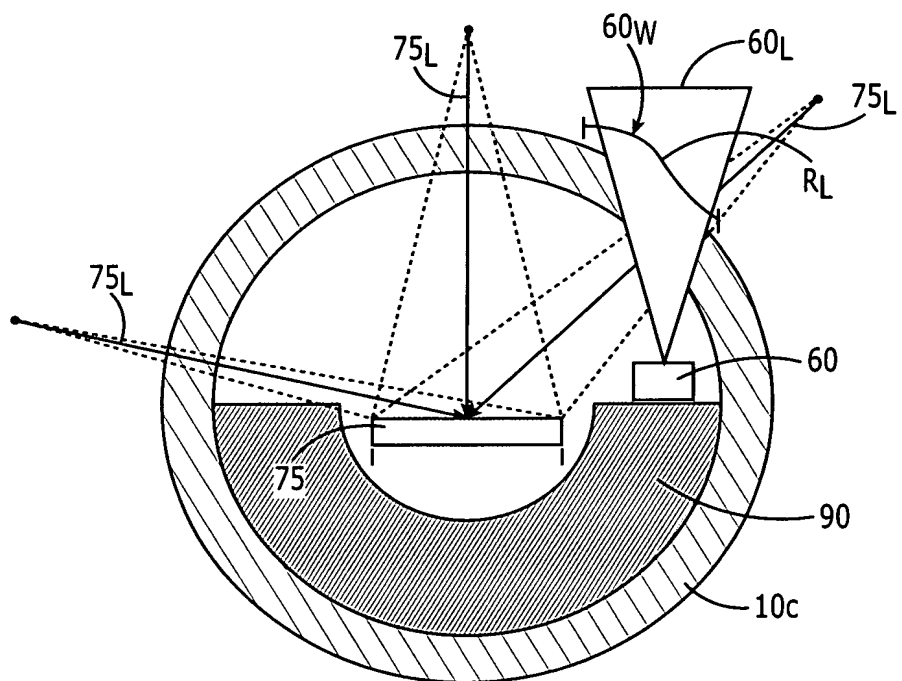


FIG. 11C

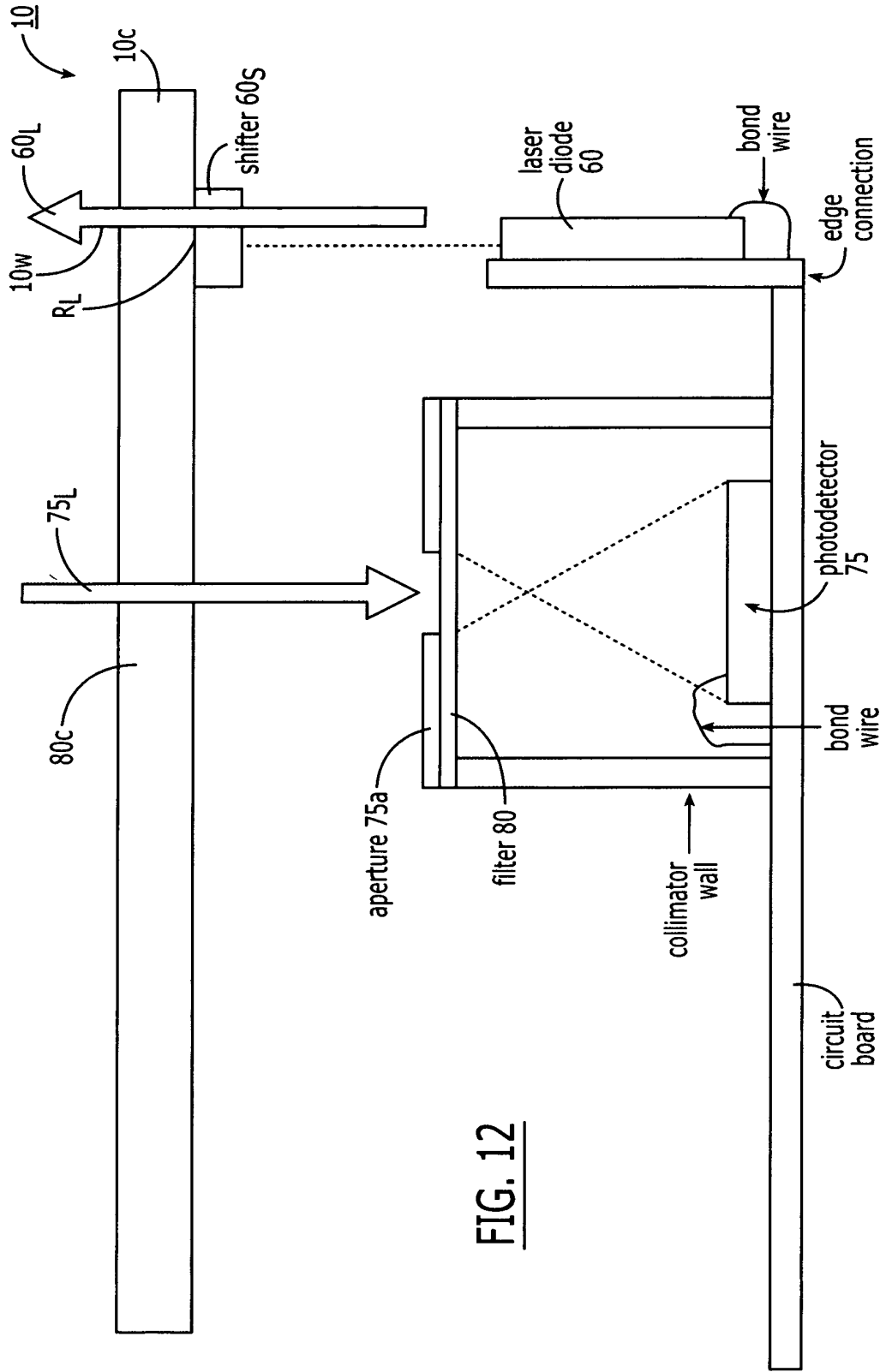
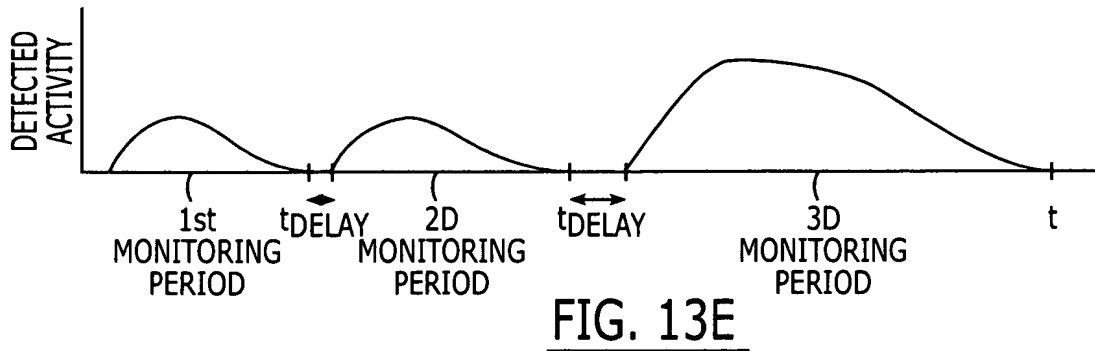
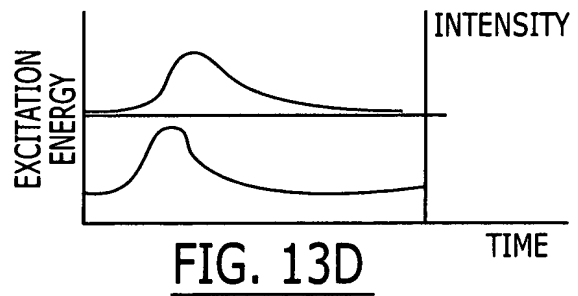
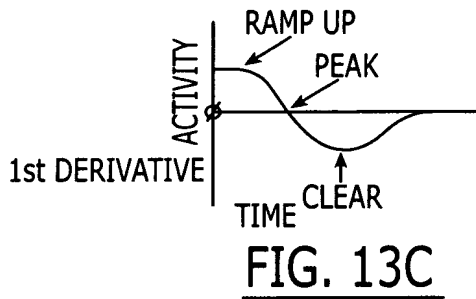
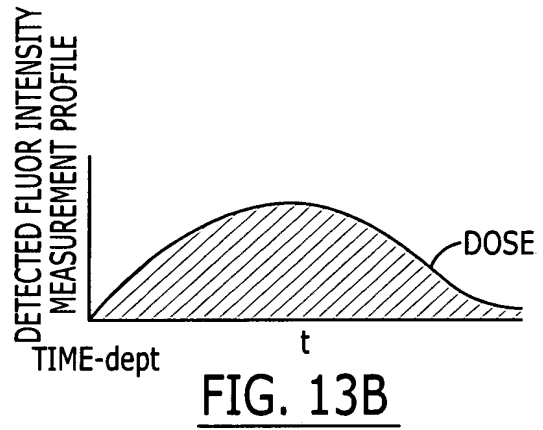
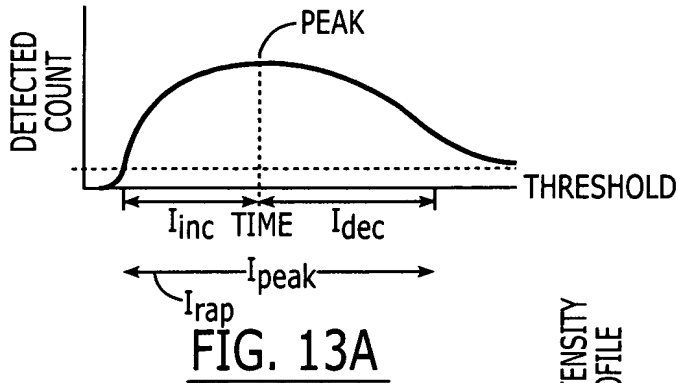


FIG. 12



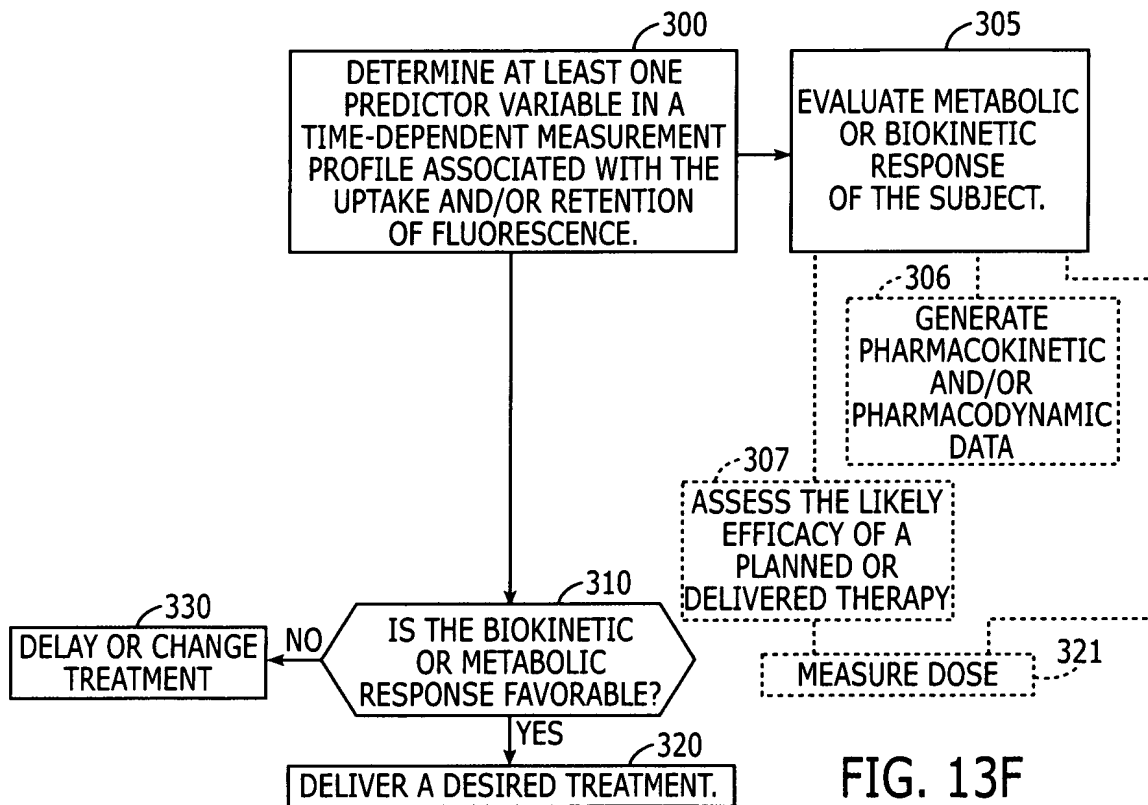


FIG. 13F

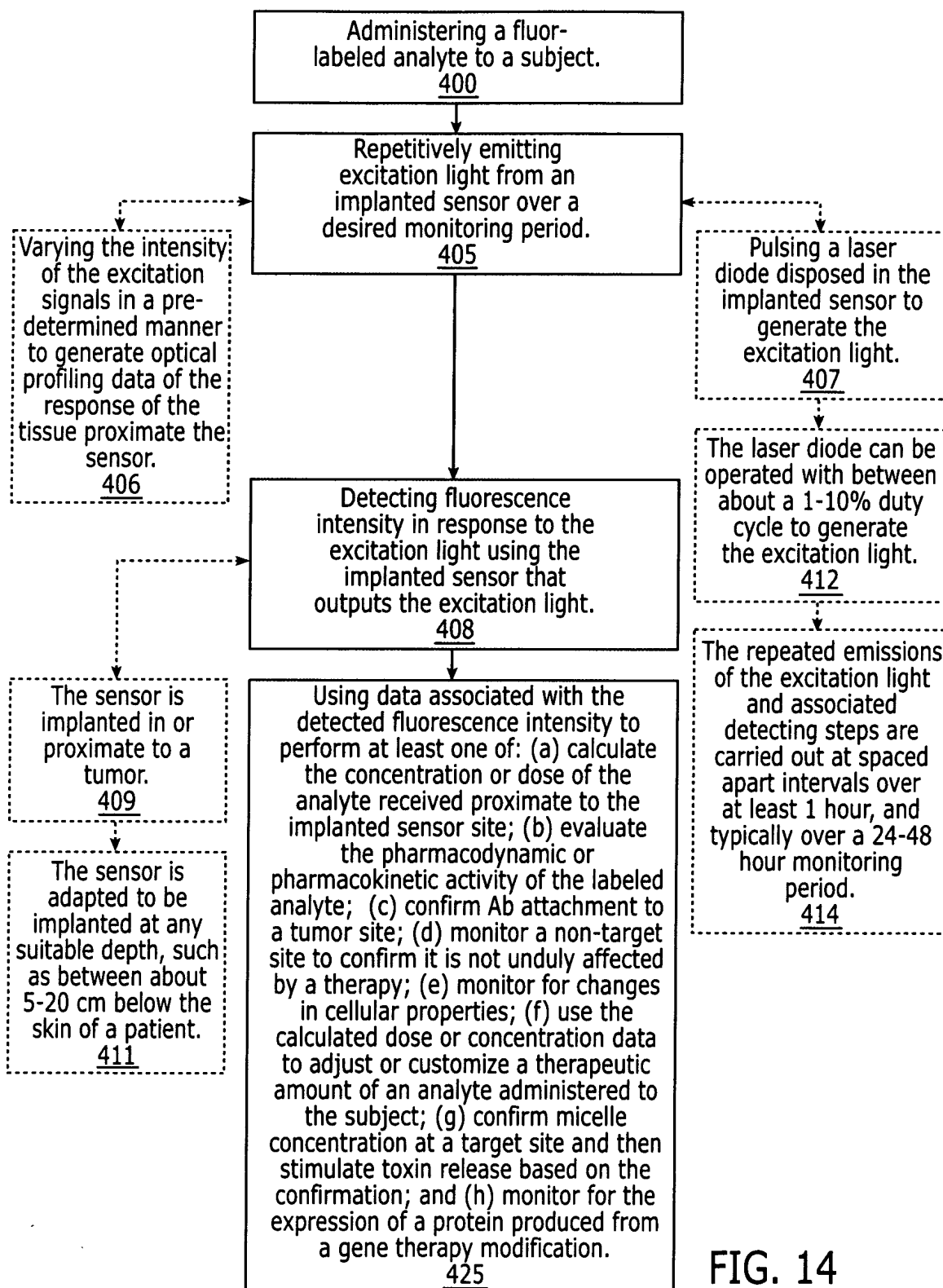


FIG. 14

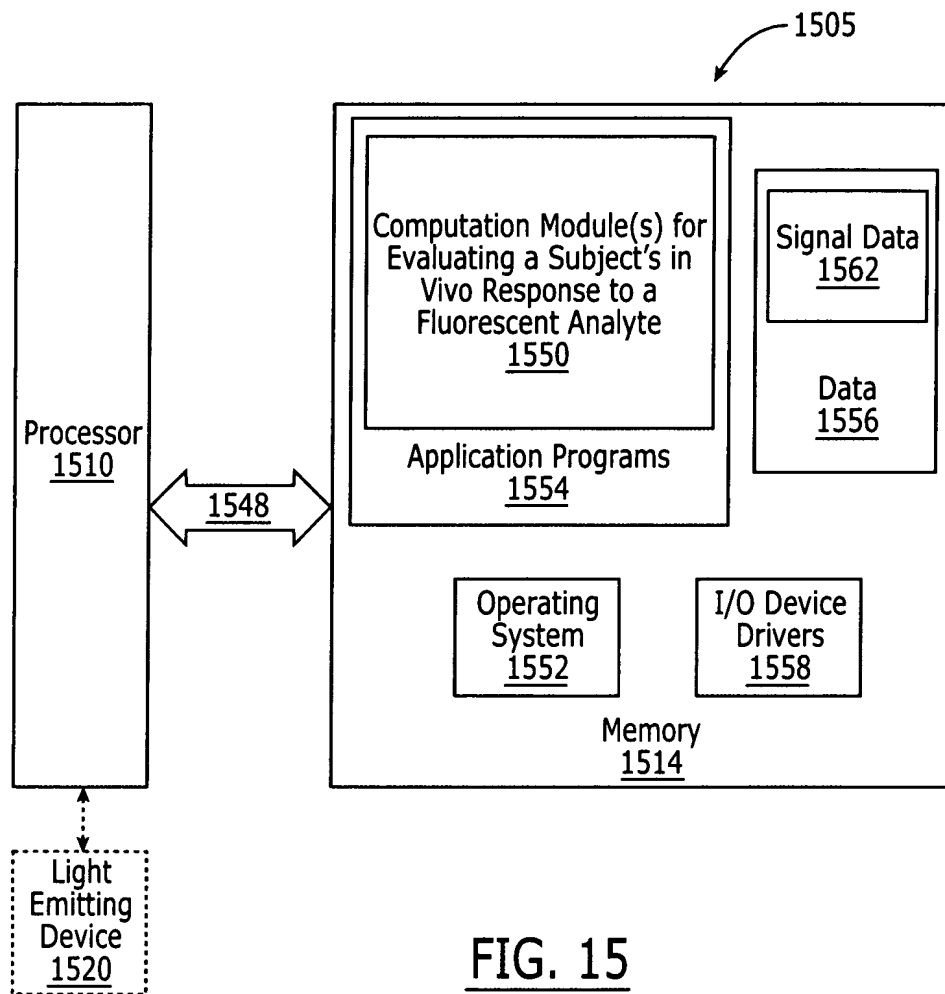


FIG. 15